

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/604,756	08/14/2003	Junaid Syed	3017	1755	
31424	7590 12/17/2004		EXAMINER		
BABCOCK	IP LLC		A, MINH D		
	SIDE DRIVE CH, IL 60047		ART UNIT PAPER NUMBER		
	o,		2821		
			DATE MAIL ED: 12/17/200	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/604,756	SYED ET AL.	
Office Action Summary	Examiner	Art Unit	
	Minh D A	2821	18-J
The MAILING DATE of this communication	n appears on the cover sheet w	ith the correspondence add	fress
Period for Reply  A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATI  - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communicatic  - If the period for reply specified above is less than thirty (30) days,  - If NO period for reply is specified above, the maximum statutory p  - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).  Status  1) Responsive to communication(s) filed on 2a) This action is FINAL.  2b)  Since this application is in condition for all closed in accordance with the practice un  Disposition of Claims	ON. FR 1.136(a). In no event, however, may a non. a reply within the statutory minimum of thir period will apply and will expire SIX (6) MON statute, cause the application to become At mailing date of this communication, even if  14 August 2003. This action is non-final.	reply be timely filed  ty (30) days will be considered timely. ITHS from the mailing date of this constant of the considered timely.	mmunication.
4) ☐ Claim(s) 1-22 is/are pending in the application 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-6,8-12 and 14-22 is/are rejected for the claim(s) 7 and 13 is/are objected to.  8) ☐ Claim(s) are subject to restriction as	hdrawn from consideration.		
Application Papers			
9) The specification is objected to by the Exa  10) The drawing(s) filed on is/are: a)  Applicant may not request that any objection to Replacement drawing sheet(s) including the county of the oath or declaration is objected to by the	accepted or b) objected to othe drawing(s) be held in abeyar orrection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CF	
Priority under 35 U.S.C. § 119		•	
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:  1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International But * See the attached detailed Office action for a certified copies of the attached detailed Office action for a certified copies of the attached detailed Office action for a certified copies of the attached detailed Office action for a certified copies of the attached detailed Office action for a certified copies of the priority docured to the certified copies of th	ments have been received. ments have been received in A priority documents have been ureau (PCT Rule 17.2(a)).	pplication No received in this National S	Stage
Attachment(s)  1) X Notice of References Cited (PTO-892)	•	Summary (PTO-413)	
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-94</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date <u>8/14/03</u>, <u>8/29/03</u>.</li> </ol>	<sup>-</sup> /	s)/Mail Date nformal Patent Application (PTO- 	-152)

Art Unit: 2821

#### DETAILED ACTION

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3, 9 and 18-22 are rejected under 35 U.S.C. 102(b) as being unpatentable by Sharman (US 6,522,305).

Regarding claim 1, Sharman discloses a radome (24) for a reflector antenna having a reflector (10 and 13) with a vertex area (V), comprising: a central portion (10) surrounded by an outer portion (13), the central portion (13) having a radius configured to focus a reflected component of an RF signal reflected by the reflector antenna to the vertex area (V); and the outer portion (10) having a radius greater than the central portion. See figures 2-6, col.2, lines 35-67 to col.5, lines 1-23.

Regarding claim 2, Sharman discloses wherein a transition between the central portion (13) and the outer portion (10) is located at a position where the reflected component from the outer portion closest to the transition reflects from the reflector without intersecting with reflector antenna. See figures 2-6.

Regarding claim 3, Sharman inherently discloses the radome (24) is injection molded dielectric plastic. See col.3, lines 36-74, teach that, the radome is made by conductive dielectric material.

Regarding claim 9, Sharman discloses RF absorbing material located

Art Unit: 2821

in the vertex area. See figures 2-7.

Regarding claims 18-22, Sharman discloses a microwave antenna comprises a feed; a reflector (10) and a radome (24) adapted to cover said reflector (10), the reflector (10) and radome (24) having interlocking peripheral structures (a peripheral flangs having a plurality screw) configured such that said radome (24) is joined to said reflector by mating said structures and rotating said radome relative to said reflector(10). See figures 2-7, col.2, lines 35-67 to col.5, lines 1-23.

3. Claims 10-12 and 14-17 are rejected under 35 U.S.C. 102(b) as being unpatentable by Pittman (US 6,292,142).

Regarding claims 10 and 15, Pittman discloses a locking assembly for a reflector antenna having a reflector (122) with a vertex area, comprising'. a radome (120) adapted to cover an open end of the reflector', a plurality of tabs (32) formed proximate a periphery of the radome (120); the tabs (32)configured to pass through a corresponding plurality of cut outs formed in a periphery of the reflector (122). See figures 1-8, col.3, lines 6-67 to col.7, lines 1-27.

Regarding claims 11-12, 14 and 16-17, Pittman discloses the tabs (32) retain the radome on the reflector when the radome is rotated after the tabs are passed through the cut-outs and a plurality of support posts formed proximate the periphery of the radome which the reflector seats against when the tabs are passed through the cut-outs and a plurality of absorbing retainers arranged proximate a periphery of the radome. See figures 1-8, col.3, lines 6-67 to col.7, lines 1-27.

Art Unit: 2821

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Sharman (US 6,522,305) in view of Pittman (US 6,292,142).

Regarding claims 4-8 and 19 Sharman discloses the claimed invention except for a plurality of tabs formed proximate a periphery of the radome', the tabs configured to pass through a corresponding plurality of cut outs formed in a periphery of the reflector and a plurality retainers arranged proximate a periphery of absorbing the radome. However, Pittman discloses a plurality of tabs formed proximate a periphery of the radome', the tabs configured to pass through a corresponding plurality of cut outs formed in a periphery of the reflector and a plurality retainers arranged proximate a periphery of absorbing the radome. See figures 1-3, col.3, lines 7-67 to col.7, lines 1-26.

It would have been an obvious to one of ordinary skill in the art at the time the invention was made to employ a plurality of tabs formed proximate a periphery of the radome', the tabs configured to pass through a corresponding plurality of cut outs formed in a periphery of the reflector and a plurality retainers arranged proximate a periphery of absorbing the radome such as that suggested by Pittman in the reflector

Art Unit: 2821

antenna of Shaman to provide a easily and quickly unlocked and disengaged from the locking assembly by depressing a finger tab of the locking.

### Allowable Subject Matter

4. Claims 7 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach that, a plurality of locking clips configured to compress when the tabs are passed through the cut outs; the locking clips decompressing into the cut outs when the radome is rotated after the tabs are passed through the cut outs; the locking clips decompressed into the cut outs inhibiting further rotation of the radome in depending claims 7 and 13.

#### **Conclusion**

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Page 6

Application/Control Number: 10/604,756

Art Unit: 2821

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Butle (US 6,437,757) and Desargant et al. (US 6,570,540) are

cited to show a reflector antenna.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Examiner Minh A whose telephone number is (571) 272-

1817. The examiner can normally be reached on M-F (5:30 –2:30 PM).

If attempts to reach the examiner by telephone is unsuccessful, the examiner's

supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone numbers for

the organization where this application or proceeding is assigned are 703-872-9306 for

regular communications and (703) 872-9319 for final communications.

Any inquiry of a general nature or relating to the status of this application should

be directed to the Technology Center receptionist whose telephone number is (571)

272-1553.

WILSON LEE RIMARY EXAMINEI

Examiner

Minh A

Art unit 2821

12/10/04